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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NGUYEN, MERILYN P	
ART UNIT	**PAPER NUMBER**
2163	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/669,612	BENSON ET AL.	
	Examiner	Art Unit	
	Merilyn P. Nguyen	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *02/06/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *Detail Action*.

DETAILED ACTION

1. Claims 1-40 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, the claim is incomplete because there are no given steps to arrive the method of synchronizing data.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Belfiore U.S. Patent Application Publication 2002/0059425.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Belfiore teaches a method of synchronizing data comprising ([0020], synchronizing data.):

receiving data from a data repository (0022, storage device allows for distributed storage and can access information from any device. Therefore can receive).

storing the data in a buffer ([0022] locally cached).

applying rules to the buffer data the rules specifying criteria for associating the buffer data with data in a core ([0018], Schema is a set of rules or standard that define how a particular type of data can be structured [0077]).

Regarding claim 2, Belfiore discloses in response to applying the rules to a buffer object in the buffer data, creating an associated core object in the core ([0080], "a local schema store can subscribe to a schema update service to update core types and schemas." Local schema store (i.e. buffer data), schema update service (i.e. rules), core types (core objects)).

Regarding claim 3, Belfiore discloses in response to applying the rules to a buffer object in the buffer data, creating an associated core object in the core ([0080]); and joining the core object with the buffer object ([0070]).

Regarding claim 4, Belfiore discloses in response to applying the rules to a buffer object in the buffer data, creating an associated core object in the core ([0080]); joining the core object with the buffer object ([0070]); and importing a buffer attribute from the buffer object to the core object ([0077]).

Regarding claim 5, Belfiore discloses a sub-schema element modeling data types from the data repository ([0083] a schema recognizer service identifies the schema type of a data instance so that an application knows what to do with the data. That is schema type (i.e. sub-schema)).

Regarding claim 6, Belfiore discloses an attribute-inclusion element comprising one or more attributes to be imported into the core ([0077]); a projection element specifying criteria for creating a core object related to a buffer object ([0077]); and a join element specifying criteria related to linking the core object with the buffer object ([0070]).

Regarding claim 7, Belfiore discloses a connector-filter element specifying criteria related to linking the core object with the buffer object ([0084]); an export-attribute-flow element

specifying criteria related to associating an attribute of the core object with the buffer object ([0068]).

Regarding claim 8, Belfiore discloses a provisioning-cleanup element specifying an action to take in response to unlinking the core object from the buffer object ([0084]).

Regarding claim 9, Belfiore discloses an extension element specifying an extension related to an assembly to be employed to carry out one or more of the element: in the schema ([0076]).

Regarding claim 10, Belfiore discloses receiving a data set from each of the plurality of data repositories, each data set comprising one or more repository objects, each repository object having one or more repository attributes associated with one of the data repositories ([0179], " meta-directory is a data store that contains or holds a subset of the objects found in adapted or other meta-directories. For each object, the meta-directory holds a subset of the attributes of that object. The meta-directory also contains references to directories that contain more complete information about the objects."); retrieving a plurality of schemas, each schema specifying criteria related to one of the data sets ([0187], ((0187) "the directory component 150 also includes an Internet meta-directory service 940. The Internet meta-directory service is capable of searching Internet for data or documents that have a particular schema. ([0018], Schema is a set of rules or standards that define how a particular type of data can be structured." That is metadirectory is able to retrieve schema that contains data structures.); and aggregating

repository objects in an aggregated space based on the data set and the schema criteria ([0122], "Event composition 608 aggregates, filters, and transforms lower-level events (atomic events 606) into higher-level events 612 and, at times, maps the events directly into actions, such as world action 614.).

Regarding claim 11, Belfiore discloses storing the data sets in a buffer ([0022], locally cached.).

Regarding claim 12, Belfiore discloses wherein the storing comprises storing each of the data sets in an associated portion of the buffer ([0022], locally cached).

Regarding claim 13, Belfiore discloses wherein at least one of the plurality of schemas comprises a sub-schema element specifying object types and attributes of objects associated with the data repository ([0083]).

Regarding claim 14, Belfiore discloses retrieving the sub-schema from the associated data repository ([0087]).

Regarding claim 15, Belfiore discloses a projection element specifying criteria for creating an aggregated object in the aggregated space related to a repository object in the data set associated with the schema ([0077]); and a join element specifying criteria related to linking the aggregated object to the repository object ([0070]).

Regarding claim 16, Belfiore discloses an attribute-inclusion element specifying an attribute to be imported from the associated data repository into the aggregated space ([0077]).

Regarding claim 17, Belfiore discloses an attribute-inclusion element specifying an attribute to be imported from the associated data repository into the aggregated space ([0077]; and an export-attribute-now element specifying criteria related to associating the imported attribute with one or more repository objects in one or more of the data sets ([0068]).

Regarding claim 18, Belfiore discloses wherein at least one of the schemas comprise a join element specifying criteria related to linking an aggregated object in the aggregated space to a repository object in one of the data sets ([0070]); and a provisioning-cleanup element specifying an action to take in response to unlinking the aggregated object from the repository object ([0084]).

Regarding claim 19, Belfiore discloses associating a first attribute of a first repository object of an object type with an aggregated object in the aggregated space ([0070]); and associating a second attribute of a second repository object of the object type with the aggregated object ([0070]).

Regarding claim 20, Belfiore discloses a computer-readable medium comprising a computer-readable schema for use in a metadirectory operable to synchronize a plurality of data repositories, the schema comprising:

a schema sub-element associated with one of the plurality of data repositories, wherein the schema sub-element specifies object types associated with objects from the data repository ([0179], "A meta-directory is a data store that contains or holds a subset of the objects found in adapted or other meta-directories").

Regarding claim 21, Belfiore discloses wherein the schema sub-element further specifies attributes associated with objects from the data repository ([0083]).

Regarding claim 22, Belfiore discloses wherein the schema further comprises: a projection element specifying criteria for creating an aggregated object in an aggregated space, the aggregated object related to a repository object from one of the plurality of data repositories ([0077]); and a join element specifying criteria related to linking the aggregated object to the repository object ([0070]).

Regarding claim 23, Belfiore discloses wherein the schema further comprises a projection element specifying criteria for creating an aggregated object in an aggregated space, the aggregated object related to a repository object from one of the plurality of data repositories ([0077]); a join element specifying criteria related to 'inking the aggregated object to the

repository object ([0070]); and a provisioning-cleanup element specifying an action to take in response to unlinking the aggregated object from the repository object ([0084]).

Regarding claim 24, Belfiore discloses all the subject matter as set forth above in claim 23 and further discloses an attribute-inclusion element specifying an attribute of the repository object to be associated with the aggregated object ([0077]).

Regarding claim 25, Belfiore discloses all the subject matter as set forth above in claim 23 and further discloses an attribute-inclusion element specifying an attribute of the repository object to be associated with the aggregated objects ([0068]).

Regarding claim 26, Belfiore discloses an element specifying a script ([0085]).

Regarding claim 27, Belfiore discloses connector-filter criteria specifying one or more repository object types that are not to be linked to an object tin the metadirectory ([0084]).

Regarding claim 28, Belfiore discloses attribute criteria specifying attribute values associated with object types that are not to be linked to an object in the metadirectory ([0084]).

Regarding claim 29, Belfiore discloses wherein the one or more repository object types are selected from a set of object types comprising: a contact object type ([0073], contacts); a user

object type ([0073], profiles); an organization object type ([0074], employees); and an organizational unit object type ([0074], other business data).

Regarding claim 30, Belfiore discloses Belfiore discloses a metadirectory for aggregating data from a plurality of remote repositories ([0179], "A meta-directory is a data store that contains or holds a subset of the objects found in adapted or other meta-directories") comprising:

a plurality of management agents, each management agent associated with one of the plurality of remote repositories ([0269]. "... news agent to find recent environmental news clips from selected sources and have them available when she wakes up.");

a connector space operable to receive data from data from the plurality of management agents ([0022], locally cached (connector space or buffer) by storage service (agent)); and

a synchronization engine operable to aggregate data from the connector space based on declarative rules related to the management agents ([0022], synchronization of data offline and online for a storage service).

Regarding claim 31, Belfiore discloses wherein the declarative rules comprise a plurality of management agent schemas, each management agent schema associated with one of the management agents ([0269]).

Regarding claim 32, Belfiore discloses an aggregated space operable to receive aggregated data from the connector space ([0070]).

Regarding claim 33, Belfiore discloses wherein each of the plurality of management agents is further operable to retrieve a repository schema from the associated remote repository, the repository schema specifying data object types used by the associated remote repository ([0187]).

Regarding claim 34, Belfiore discloses wherein each of the repository schemas further specify attributes used by the associated remote repository ([0072-0076], schema items).

Regarding claim 35, Belfiore discloses wherein each of the management agent schemas comprise a repository type element specifying the type of repository associated with the management agent (0072-0076, Schemas such as social, base, business, system, and applications.).

Regarding claim 36, Belfiore discloses wherein the repository type element is selected from a set of repository types comprising: an Lightweight Directory Access Protocol repository type ([0080], LDAP); a file repository type ([0022], files may be stored in a mega-store); and a database repository type ((0172) Database).

Regarding claim 37, Belfiore discloses wherein the repository type element specifies a repository sub-type selected from a set of repository sub-types comprising: an Active Directory. sub-type; a delimited text sub-type; a Structured Query Language (SQL) sub-type; and an Oracle

sub-type. ([0086], pieces of data in any application used to specify elements. [0171], SQL engine accesses data to be viewed.)

Regarding claim 38, Belfiore discloses wherein each of the management agents are further operable to convert data from the associated remote repository into data in an isomorphic form ([0070]).

Regarding claim 39, Belfiore discloses wherein each of the management agent schemas comprise Extensible Markup Language (XML) elements ([0083], xml).

Regarding claim 40, Belfiore discloses a metadirectory schema applicable to all management agents, the metadirectory schema specifying import-attribute-now rules related to importing attributes from the connector space into an aggregated space ([0077]).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Merilyn P Nguyen whose telephone number is 571-272-4026. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

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